

a!
Can't

ships' cranes, turntables for machine tools, rotating carousels, for example in bottling plants, medical apparatus, tail rotating collars for wood collecting machines, equipment for rides in amusement parks, etc. For many such applications it is important that the overall height of the rotatable connection be as low as possible, which is why the overall height of such ball-bearing slewing rings is in practice often scarcely greater than the height of the toothing of the connection part of the rotatable connection driven by a motor. Whereas the ball-bearing slewing rings are generally protected by rubber seals against dirt and contamination and thus against excessive wear and tear, corresponding safety measures are not adopted for the toothing, and accordingly foreign bodies can penetrate the latter during heavy-duty operation, for example on building sites, etc., which then reach the space between the toothing and the gear element, for example pinion or worm, meshing therewith and either become ground up or damage the tooth profiles. This latter danger arises in particular from hard materials such as stones or rock, or from hard metal turnings formed in machining tools. On account of the dirt particles penetrating the region of the toothing the lubricating grease also quickly becomes contaminated and therefore has to be replaced at short intervals. Finally, the unprotected toothing constitutes a potential source of injury, for example to the maintenance staff.
